



PUBLIC NOTICE

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Tutorial on Free Space Optical Communications

The FCC's Office of Engineering and Technology is sponsoring a tutorial on "Free Space Optical Communications on October 3, 2002 from 1:00 p.m. to 3:00 p.m. in the Commission Meeting Room (TW-C305), 445 12th Street S.W., Washington, D.C.

Mr. John Schuster, CTO of Terabeam Corporation will present an overview of Free Space Optical communications, also known as FSO. FSO generally refers to the practice of transmitting information, or data, through the atmosphere by means of modulated beams of light. Conceptually, FSO operates almost exactly like fiber optics except instead of transmitting light through a strand of glass, light is transmitted through the air between two line of sight locations. FSO's similarity to fiber includes very high data carrying capacities thus making it a candidate for first mile/last mile connections between end users and the long haul fiber optics networks, particularly in settings where the installation of fiber is not cost-effective. This presentation is intended to provide a broad overview of the characteristics and capabilities of FSO technology. In particular, it will discuss FSO transceiver design, eye-safety, atmospheric effects, availability prediction, interference immunity and network integration. The presentation will also review current applications and deployments of FSO including Metropolitan Area Networks (MANs), "sprinkler head" extensions of fiber, spatially diverse connectivity and disaster recovery. Lastly, the presentation will cover opportunities for using FSO technology in combination with 60 GHz millimeter wave technology to provide very high capacity and high reliability wireless networks.

The public is invited to attend, no pre-registration is needed. For further information contact Young Carlson at 202-418-2427 voice and email y Carlson@fcc.gov.

The audio portion of this tutorial will be broadcast live on the Internet via the FCC's Internet audio broadcast pate at <http://www.fcc.gov/realaudio>. Videotapes of the tutorial will be available from the FCC contractor, CACI Productions Group (formerly InFocus), 341 Victory Drive, Herndon, VA 20170. Telephone 703-834-1470.

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